REMARKS/ARGUMENTS

Applicant asserts that no new matter is presented by these amendments and respectfully request entry of the same.

Drawings Objections

Figures 4-11 are objected to because each of the figures shows an arrow on the top of the diagram. Applicant hereby submits a new set of corrected drawing for figures 4-11. For purpose of clarity, Figures 4-11 have been amended to include the termination of the process at the end of the arrows on the bottom of each diagram; and to delete the arrow on the top of each diagram. Entry of these amendments is respectfully requested. Applicant assert that no new matter is presented by these amendments and respectfully request entry of the same. Applicant respectfully requests that the objections of Figures 4-11 to be withdrawn.

Claim Objections

Claims 9-11 are objected to because of informalities.

Claim 9 has been amended to change the dependency to claim 95.

Claim 10 has been amended to change "binary object, wherein said 100 probe intensity values." to – binary object.

Claim 74 has been amended to change the dependency to claim 97.

Claim 75 has been amended to change "binary object, wherein said 100 probe intensity values." to – binary object.–.

Claim 28 has been amended to change the dependency to claim 24.

Claim 29 has been amended to change the dependency to claim 28.

Claim 37 has been amended to change the dependency to claim 36.

Applicant respectfully requests that the objections of claims 9-11, 28-29, 37, and 75-76 to be withdrawn.

Rejections of Claims under 35 USC § 112

Claims 3-8, 32-37 and 68-73 are allegedly rejected under 35 USC 112 second paragraph. Applicant respectfully disagrees. The Examiner alleges that the limitation "the set of data need not to be frequently accessed in arbitrary ways" is unclear. Applicant respectfully submits that, as used in the current application, one of skill in the art would understand that data can be accessed in arbitrary and non-arbitrary way and data access in a non-arbitrary way means that data are accessed in one or more particular fashion in majority of the cases. For example, if the set of data is associated by a necessity or a reason (see page 20, line 2 ; see also paragraph starting on page 20 line 3), the data will be often accessed in a particular way rather than in a random fashion. Therefore, Applicant respectfully requests the rejections of claims 3-8; 32-37; and 68-73 to be withdrawn.

Rejection of Claims under 35 USC 103 should be withdrawn

Claims 1-3, 9, 12-14, 22, 23, 30-32, 38-40, 43-45, 53, 54, 66-68, 74, 77-79, 87, 88 and 95-98 are rejected under 35 USC 103 for allegedly being unpatentable over Balaban et al. in view of Woodhill et al.

The Examiner alleges that Woodhill et al teaches storing the groups in a database as single binary objects, wherein each of the groups is stored as one single object. Applicant respectfully disagrees. Woodhill et al. discusses a system for distributed management of storage space on a networked computer (Col. 1, lines 66-67). Means for copying binary objects and for

calculating binary object identifiers are also discussed (col. 2, lines 1-38). It does not disclose storing groups in a database as single binary objects. In fact, Woodhill et al. does not mention storing binary objects in a database, not to mention storing groups as single binary objects.

The Examiner alleges that one of skill in the art would want to incorporate Woodhill et al's teaching into Balaban et al.'s because it offers certain advantages. Applicant respectfully submits that Woodhill et al. discuss how to manage binary objects in a networked computer system, but does not disclose storing groups as binary objects in a database. In addition, the advantages Woodhill et al mentions are related to the management of data storage in networked computers. In contrast, the primary benefit of grouping and storing groups as single binary objects is to increase data access speed in a database environment. Therefore, applicant respectfully submits that the combination of the references fails to teach or suggest the elements of the claims. The Examiner has failed to establish prima facie obviousness of the rejected claims and this rejection under 35 USC 103 should be withdrawn.

Rejection of claims 2, 3, 14, 23, 31, 32, 45, 54, 67, 68, 79, 88 and 12, 43 and 77 and 39, 40, 96 and 98 should also be withdrawn for the same reason.

Claims 10, 11, 41, 42, 75 and 76 are rejected under 35 USC 103(a) as allegedly being unpatentable over Balaban et al. in view of Woodhill et al. and Ghandoor et al.

Ghandoor et al is cited to provide a teaching for grouping at least a 100 probe intensity values. Applicant respectfully disagrees with the Examiner. Ghandoor et al. discusses multiple probe data analysis. It does not disclose grouping of probe intensities for storage/retrieval. For example, the section cited by the Examiner (col. 17, lines 18-30 and Fig 6) discusses analysis of intensity value (in particular, principal component analysis) and the relationship between intensity and concentration (Fig. 6). Therefore, the Ghandoor et al. reference does not teach or

suggest storing groups of intensity values as binary objects in a database. Therefore, this rejection of Claims should be withdrawn.

Claims 11, 42 and 76 are rejected under 35 USC 103(a) as allegedly being unpatentable over Balaban et al. in view of Woodhill et al. and Ghandoor et al. As discussed above, the Ghandoor et al. reference does not teach or suggest storing groups of intensity values as binary objects in a database. Therefore, this rejection of Claims should be withdrawn.

Claims 4-8, 15, 28, 29, 33-37, 46, 55, 56, 69-73, 80, 86, 89, 90 are rejected under 35 USC 103(a) as allegedly being unpatentable over Balaban et al. in view of Woodhill et al. and Keesey et al. Keeset et al. Applicant respectfully submits that Keesey et al. does not disclose storing intensity values in groups in a database as binary objects. Therefore, the combination of the Keesey et al. reference with Balaban et al. and Woodhill et al. would not make the rejected claims obvious. Therefore, this rejection of claims should be withdrawn.

The rejection of Claims 24, 56, 90, 16-21, 47-52, 81-83, 86. 16, 47, 81, 17, 18, 48, 49, 82-85, 19-21, 50-52 under 35 USC 103(a) as allegedly being unpatentable over Balaban et al. in view of Woodhill et al. and Ghandoor et al. and/or Keesey et al. should be withdrawn for the above reasons.

Claims 26, 27, 57,-63 and 91-94 are rejected under 35 USC 103(a) as allegedly being unpatentable over Balaban et al. in view of Woodhill et al. and Keesey et al. and Hacia et al.

Hacia et al. is cited to provide teaching of 250 bases segment region of interest. It does not disclose storing/retrieving groups of intensity values as binary objects in a database. Therefore, this rejection of claims should also be withdrawn.

CONCLUSION

For these reasons, Applicant believes all pending claims are now in condition for allowance. If the Examiner has any questions pertaining to this application or feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

Date: 11-5-04

By _____
Wei Zhou Reg. No.:44,419

Attachments (Figures 4-11)

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